

(19)

Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11)

**EP 1 152 120 A3**

(12)

**EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:

12.06.2002 Bulletin 2002/24

(51) Int Cl.7: **E21B 43/10, E21B 43/08**

(43) Date of publication A2:

07.11.2001 Bulletin 2001/45

(21) Application number: **01304042.3**

(22) Date of filing: **03.05.2001**

(84) Designated Contracting States:

**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE TR**

Designated Extension States:

**AL LT LV MK RO SI**

(30) Priority: **05.05.2000 US 565899**

(71) Applicant: **Halliburton Energy Services, Inc.**

**Dallas, Texas 75381-9052 (US)**

(72) Inventors:

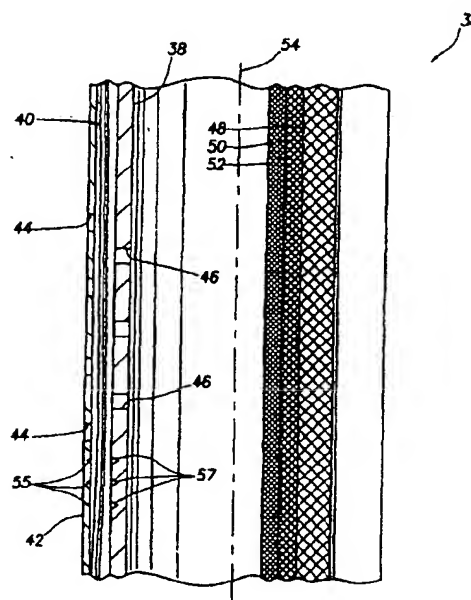
- **Castano-Mears, Ana M.**  
**Coppell, Texas 75019 (US)**
- **Gano, John C.**  
**Carrollton, Texas 75007 (US)**
- **Echols, Ralph H.**  
**Carrollton, Texas 75287 (US)**

(74) Representative: **Curtis, Phillip Anthony et al**

**A.A. Thornton & Co.,  
235 High Holborn  
London WC1V 7LE (GB)**

(54) **Expandable well screen**

(57) An expandable well screen (36) provides increased collapse, torsional and tensile strength. In an embodiment, the expandable well screen (36) includes a generally tubular base pipe (38) and an external filtering media (40). The well screen (36) is configured to have sufficient torsional and tensile strength for conveyance and positioning in a wellbore, while also having sufficient strength to prevent collapse when the screen (38) is radially expanded.



**FIG.2**

**EP 1 152 120 A3**

**BEST AVAILABLE COPY**



European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number  
EP 01 30 4042

| DOCUMENTS CONSIDERED TO BE RELEVANT   |  |   |  |
|---|--|---|--|
| Category  | Citation of document with indication, where appropriate, of relevant passages  | Relevant to claim                                 | CLASSIFICATION OF THE APPLICATION (Int.Cl.7) |
| X   | FR 2 771 133 A (DRILLFLEX)<br>21 May 1999 (1999-05-21)<br>* claim 1 *<br>* figures 6,7 *   | 1,9   | E21B43/10<br>E21B43/08                       |
| X   | US 3 099 318 A (MILLER MONTGOMERY K ET AL)<br>30 July 1963 (1963-07-30)<br>* column 7, line 29-32 *<br>* figures 1-4 *                 | 1,9   |  |
| X   | WO 98 49423 A (SHELL CANADA LTD ;SHELL INT RESEARCH (NL))<br>5 November 1998 (1998-11-05)<br>* page 4, line 28-35 *<br>* figures 3,4 * | 7   |  |
| A   | US 5 901 789 A (KENTER CORNELIS JAN ET AL)<br>11 May 1999 (1999-05-11)<br>* the whole document *                                       | 1,3,5,7-10  |  |
|   |  |   | TECHNICAL FIELDS<br>E21B                     |
| The present search report has been drawn up for all claims  |  |   |  |
| Place of search<br>THE HAGUE  |  | Date of completion of the search<br>19 April 2002 | Examiner<br>Schouten, A                      |
| CATEGORY OF CITED DOCUMENTS<br>X: particularly relevant if taken alone<br>Y: particularly relevant if combined with another document of the same category<br>A: technological background<br>O: non-written disclosure<br>P: intermediate document<br>T: theory or principle underlying the invention<br>E: earlier patent document, but published on or after the filing date<br>D: document cited in the application<br>L: document cited for other reasons<br>&: member of the same patent family, corresponding document |  |   |  |

EPO FORM 1503 03 82 (POAC01)

BEST AVAILABLE COPY

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 30 4042

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

19-04-2002

| Patent document<br>cited in search report |   | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
|---|---|---------------------|----------------------------|---------------------|
| FR 2771133                                | A | 21-05-1999          | FR 2771133 A1              | 21-05-1999          |
|   |   |                     | AU 1159199 A               | 07-06-1999          |
|   |   |                     | WO 9925951 A1              | 27-05-1999          |
| US 3099318                                | A | 30-07-1963          | NONE                       |                     |
| WO 9849423                                | A | 05-11-1998          | AU 717503 B2               | 30-03-2000          |
|   |   |                     | AU 7651798 A               | 24-11-1998          |
|   |   |                     | BR 9809005 A               | 08-08-2000          |
|   |   |                     | WO 9849423 A1              | 05-11-1998          |
|   |   |                     | EP 0980462 A1              | 23-02-2000          |
|   |   |                     | NO 995248 A                | 27-10-1999          |
| US 5901789                                | A | 11-05-1999          | AU 710745 B2               | 30-09-1999          |
|   |   |                     | AU 7568096 A               | 29-05-1997          |
|   |   |                     | BR 9611456 A               | 17-02-1999          |
|   |   |                     | DE 69617258 D1             | 03-01-2002          |
|   |   |                     | EA 980433 A1               | 29-10-1998          |
|   |   |                     | WO 9717524 A2              | 15-05-1997          |
|   |   |                     | EP 0859902 A2              | 26-08-1998          |
|   |   |                     | JP 11514712 T              | 14-12-1999          |
|   |   |                     | NO 982087 A                | 07-07-1998          |
|   |   |                     | NZ 322015 A                | 28-10-1999          |
|   |   |                     | US 6012522 A               | 11-01-2000          |

EPO FORM P/ISA

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

BEST AVAILABLE COPY